

Claim Listing

Please amend claims 10, 17, 37, 44, 55, and 62. Please add claims 64-66. The following listing of claims, if entered, replaces all previous versions of the claims.

1. (Original) A method for maintaining a common session identifier in a network, comprising:
providing a session identifier to an off-load server.
2. (Original) The method recited in Claim 1, wherein:
providing the session identifier further comprises providing the session identifier as a non-required parameter in accordance with a tunnel protocol.
3. (Original) The method recited in Claim 1, wherein:
providing the session identifier further comprises providing the session identifier in a session setup request.
4. (Original) The method recited in Claim 1, further comprising:
determining whether the session identifier is provided as a non-required parameter in accordance with a tunnel protocol.
5. (Original) The method recited in Claim 4, further comprising:
assigning, if the session identifier is not provided, a session identifier.
6. (Original) The method recited in Claim 1, further comprising:
associating a start record with the session identifier.
7. (Original) The method recited in Claim 6, further comprising:
providing the start record to a software module that provides for performing accounting processing.

8. (Original) The method recited in Claim 1, further comprising:
associating a stop record with the session identifier.
9. (Original) The method recited in Claim 8, further comprising:
providing the stop record to a software module that provides for performing accounting processing.
10. (Currently Amended) A method for maintaining a common session identifier in a network, comprising:
determining whether the session identifier value is provided by an access server to an offload server; and
assigning, if the session identifier value is not provided by the access server, the session identifier value.
11. (Original) The method recited in Claim 10, further comprising:
inspecting a parameter list for the session identifier value.
12. (Original) The method recited in Claim 10, wherein:
determining whether the session identifier value is provided by the access server further comprises determining whether the session identifier value is contained within a non-required parameter string provided by the access server.
13. (Original) The method recited in Claim 10, further comprising:
associating a start record with the session identifier.
14. (Original) The method recited in Claim 13, further comprising:
providing the start record to a software module that provides for performing accounting processing.
15. (Original) The method recited in Claim 10, further comprising:

associating a stop record with the session identifier.

16. (Original) The method recited in Claim 15, further comprising:
providing the stop record to a software module that provides for performing accounting processing.

17. (Currently Amended) The method recited in Claim 10, further comprising:
providing the session identifier from the access server to the ~~an~~ off-load server.

18. (Original) The method recited in Claim 17, wherein:
providing the session identifier further comprises providing the session identifier as a non-required parameter in accordance with a tunnel protocol.

19. (Original) A system, comprising:
a network access server, wherein the network access server is configured to generate a session identifier, the network access server being further configured to provide the session identifier to an off-load server.

20. (Original) The system recited in Claim 19, further comprising:
an off-load server, the off-load server being coupled to receive the session identifier from the network access server.

21. (Original) The system recited in Claim 19, further comprising:
a software module that is configured to perform authentication, the software module being further configured to receive the session identifier from the network access server.

22. (Currently Amended) The system recited in Claim 19, wherein:
the network access server is further configured to provide the session identifier in a non-required parameter list according to a tunnel protocol.

23. (Original) A system, comprising:
an off-load server, wherein the off-load server is configured to receive a session identifier from a network access server.
24. (Original) The system recited in Claim 23, further comprising:
a software module that is configured to perform authentication, the software module being further configured to receive the session identifier from the network access server.
25. (Original) The system recited in Claim 23, wherein:
the off-load server is further configured to receive the session identifier from a network access server in a non-required parameter list according to a tunnel protocol.
26. (Original) The system recited in Claim 23, wherein:
the off-load server is further configured to generate a start record, the off-load server being further configured to associate the start record with the session identifier;
and
the off-load server is further configured to provide the start record to a software module that provides for performing accounting processing.
27. (Original) The system recited in Claim 23, wherein:
the off-load server is further configured to generate a stop record, the off-load server being further configured to associate the stop record with the session identifier;
and
the off-load server is further configured to provide the stop record to a software module that provides for performing accounting processing.
28. (Original) An apparatus, comprising:
means for providing a session identifier from an access server to an off-load server.

29. (Original) The apparatus recited in Claim 28, wherein:
means for providing a session identifier further comprises means for providing the
session identifier as a non-required parameter in accordance with a tunnel
protocol.
30. (Original) The apparatus recited in Claim 28, wherein:
means for providing a session identifier further comprises means for providing the
session identifier in a session setup request.
31. (Original) The apparatus recited in Claim 28, further comprising:
means for determining whether the session identifier is provided as a non-required
parameter in accordance with a tunnel protocol.
32. (Original) The apparatus recited in Claim 28, further comprising:
means for assigning, if the session identifier is not provided, a session identifier.
33. (Original) The apparatus recited in Claim 28, further comprising:
means for associating a start record with the session identifier.
34. (Original) The apparatus recited in Claim 33, further comprising:
means for providing the start record to a software module that provides for performing
accounting processing.
35. (Original) The apparatus recited in Claim 28, further comprising:
means for associating a stop record with the session identifier.
36. (Original) The apparatus recited in Claim 35, further comprising:
means for providing the stop record to a software module that provides for performing
accounting processing.

37. (Currently Amended) An apparatus, comprising:
means for determining whether a session identifier value is provided by an access server
to an off-load server; and
means for assigning, if the session identifier value is not provided by the access server,
the session identifier value.
38. (Original) The apparatus recited in Claim 37, further comprising:
means for inspecting a parameter list for the session identifier value.
39. (Original) The apparatus recited in Claim 37, wherein:
means for determining whether the session identifier value is provided by the access
server further comprises means for determining whether the session identifier
value is contained within a non-required parameter list provided by the access
server.
40. (Original) The apparatus recited in Claim 37, further comprising:
means for associating a start record with the session identifier.
41. (Original) The apparatus recited in Claim 40, further comprising:
means for providing the start record to a software module that provides for performing
accounting processing.
42. (Original) The apparatus recited in Claim 37, further comprising:
means for associating a stop record with the session identifier.
43. (Original) The apparatus recited in Claim 42, further comprising:
means for providing the stop record to a software module that provides for performing
accounting processing.
44. (Currently Amended) The apparatus recited in Claim 37, further comprising:

means for providing the session identifier from the access server to the ~~an~~ off-load server.

45. (Original) The apparatus recited in Claim 44, further comprising:
means for providing the session identifier further comprising providing the session identifier as a non-required parameter in accordance with a tunnel protocol.

46. (Original) A computer program product, encoded in computer readable media, comprising:
a first set of instructions, executable on a computer system, configured to provide a session identifier to an off-load server.

47. (Original) The computer program product of claim 46, encoded in computer readable media, wherein:
the first set of instructions, executable on the computer system, is further configured to provide the session identifier as a non-required parameter in accordance with a tunnel protocol.

48. (Original) The computer program product of claim 46, encoded in computer readable media, wherein:
the first set of instructions, executable on the computer system, is further configured to provide the session identifier in a session setup request.

49. (Original) The computer program product of claim 46, encoded in computer readable media, further comprising:
a second set of instructions, executable on the computer system, configured to determine whether the session identifier is provided as a non-required parameter in accordance with a tunnel protocol.

50. (Original) The computer program product of claim 49, encoded in computer readable media, further comprising:

a third set of instructions, executable on the computer system, configured to assign, if the session identifier is not provided, a session identifier.

51. (Original) The computer program product of claim 46, encoded in computer readable media, further comprising:

a second set of instructions, executable on the computer system, configured to associate a start record with the session identifier.

52. (Original) The computer program product of claim 51, encoded in computer readable media, further comprising:

a third set of instructions, executable on the computer system, configured to provide the start record to a software module that provides for performing accounting processing.

53. (Original) The computer program product of claim 46, encoded in computer readable media, further comprising:

a second set of instructions, executable on the computer system, configured to associate a stop record with the session identifier.

54. (Original) The computer program product of claim 53, encoded in computer readable media, further comprising:

a third set of instructions, executable on the computer system, configured to provide the stop record to a software module that provides for performing accounting processing.

55. (Currently Amended) A computer program product, encoded in computer readable media, comprising:

a first set of instructions, executable on a computer system, configured to determine whether the session identifier value is provided by an access server to an off-load server; and

a second set of instructions, executable on a computer system, configured to assign, if the session identifier value is not provided by the access server, the session identifier value.

56. (Original) The computer program product of claim 55, encoded in computer readable media, further comprising:

a third set of instructions, executable on a computer system, configured to inspect a parameter list for the session identifier value.

57. (Original) The computer program product of claim 55, encoded in computer readable media, wherein:

the first set of instructions, executable on a computer system, is further configured to determine whether the session identifier value is contained within a non-required parameter string provided by the access server.

58. (Original) The computer program product of claim 55, encoded in computer readable media, further comprising:

a third set of instructions, executable on a computer system, configured to associate a start record with the session identifier.

59. (Original) The computer program product of claim 58, encoded in computer readable media, further comprising:

a fourth set of instructions, executable on a computer system, configured to provide the start record to a software module that provides for performing accounting processing.

60. (Original) The computer program product of claim 55, encoded in computer readable media, further comprising:

a third set of instructions, executable on a computer system, configured to associate a stop record with the session identifier.

61. (Original) The computer program product of claim 60, encoded in computer readable media, further comprising:

a fourth set of instructions, executable on a computer system, configured to provide the stop record to a software module that provides for performing accounting processing.

62. (Currently Amended) The computer program product of claim 55, encoded in computer readable media, further comprising:

a third set of instructions, executable on a computer system, configured to provide the session identifier from the access server to the ~~an~~ off-load server.

63. (Original) The computer program product of claim 62, encoded in computer readable media, wherein:

the third set of instructions, executable on a computer system, is further configured to provide the session identifier as a non-required parameter in accordance with a tunnel protocol.

64. (New) The method of claim 1, wherein

the off-load server provides one of Point-to-Point Protocol (PPP), Serial Line Internet Protocol (SLIP), Multipoint Point-to-Point Protocol, and PPP over Ethernet (PPPoE) service to the network access server

65. (New) The method of claim 64, further comprising:

assigning the session identifier to a call, prior to providing the session identifier to the off-load server, and

sending an access request to an Authentication, Authorization, and Accounting (AAA) server, wherein

the access request comprises the session identifier and a Dialed Number Identification Service (DNIS) number associated with the call, and

the assigning, the providing, and the sending are performed by a network access server.

66. (New) The method of claim 65, further comprising:
sending a second access request from the off-load server to the AAA server, wherein
the second access request comprises the session identifier and a username
associated with the call.